

Warping grid

FIG 3



Mask

FIG 4



Dithered  
Image

FIG 5

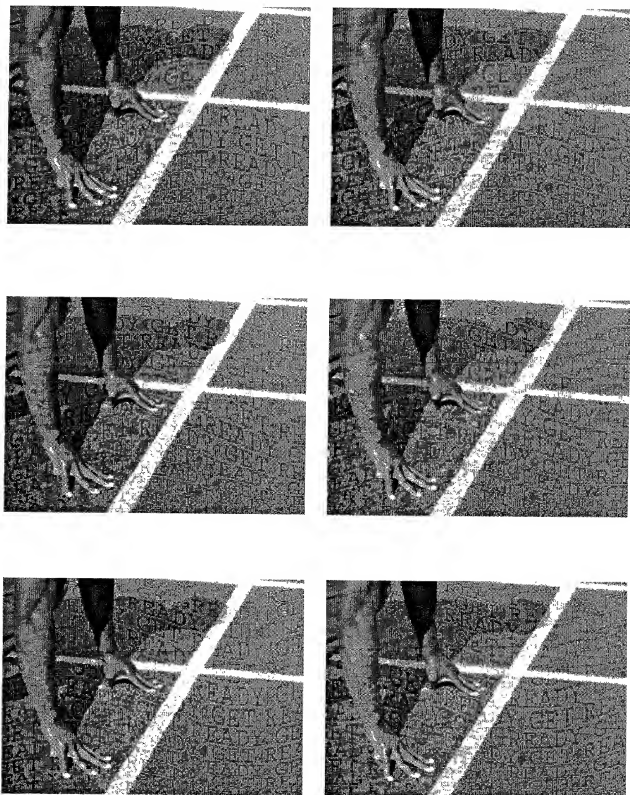


FIG. 6

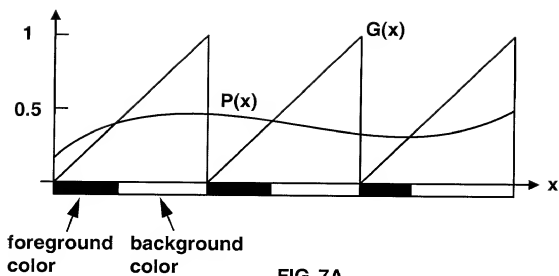


FIG. 7A

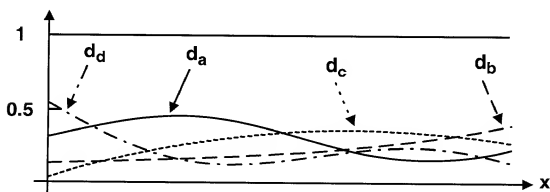


FIG. 7B

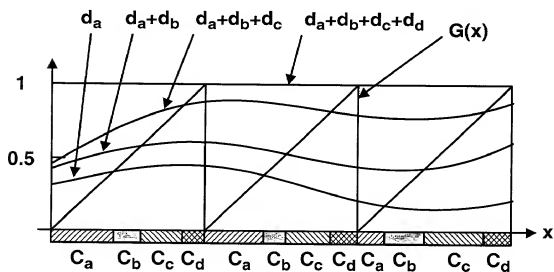


FIG. 7C

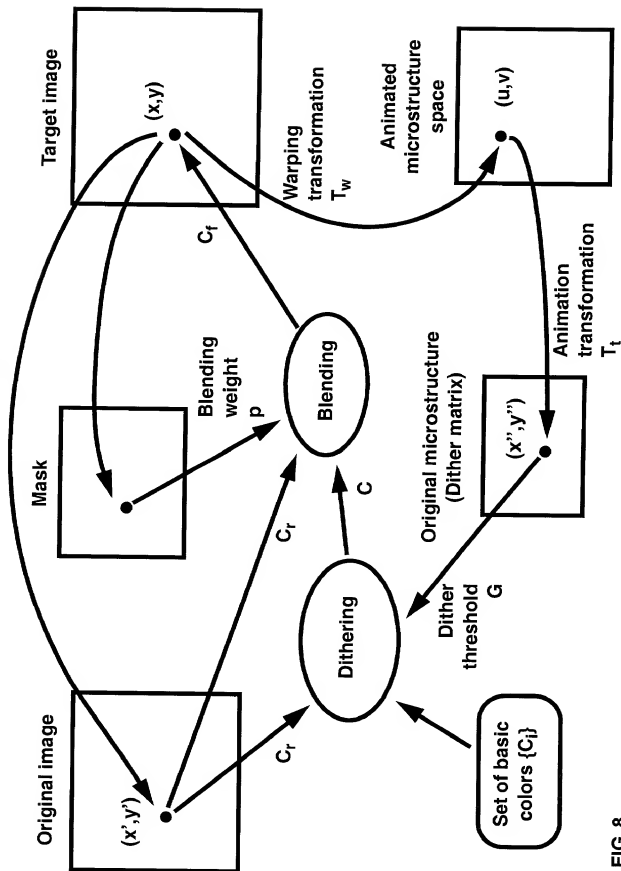


FIG. 8

0990227.071301

FIG 9A

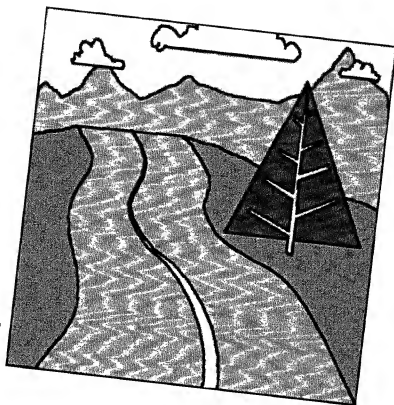


FIG 9B

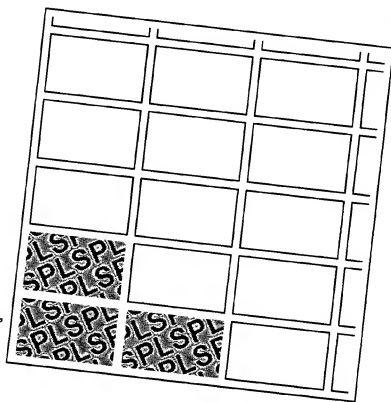


FIG. 10A

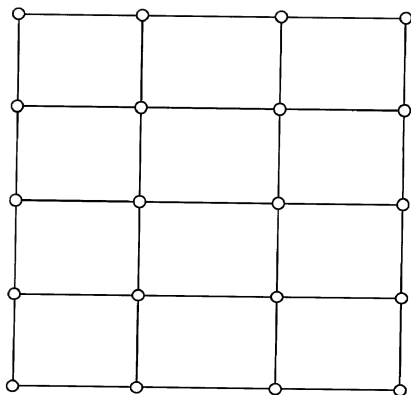


FIG. 10B

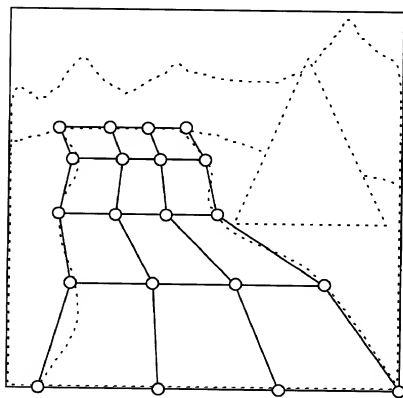




FIG. 11A

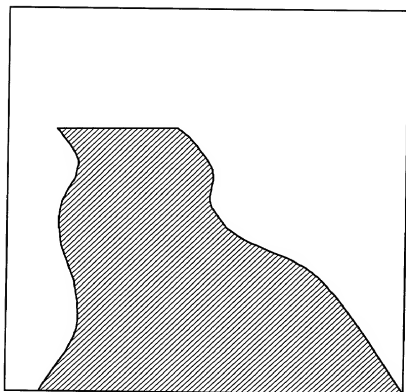


FIG. 11B

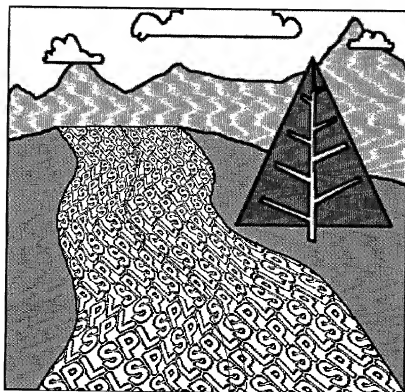
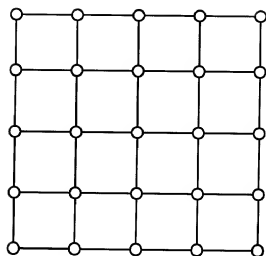




FIG. 12

Original grid



Warped grid

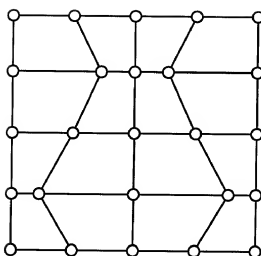


FIG. 13A

Microstructure

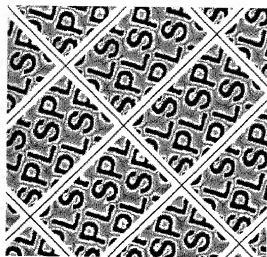


FIG. 13B

Warped microstructure

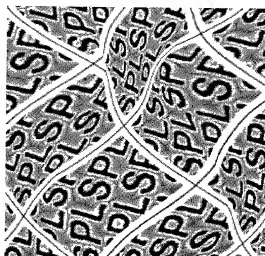


FIG. 13C

FIG. 14A

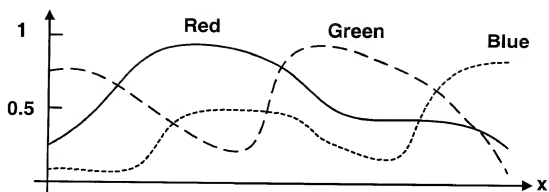


FIG. 14B

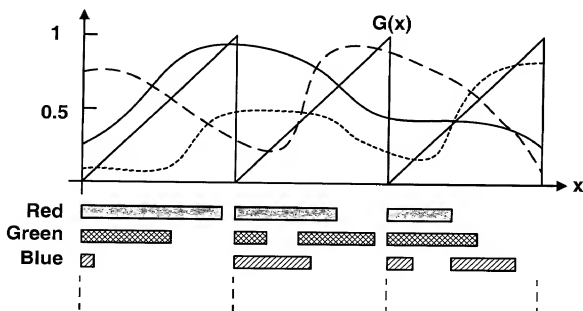
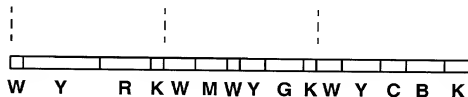


FIG. 14C



R: Red      C: Cyan      W: White  
 G: Green    M: Magenta    K: Black  
 B: Blue      Y: Yellow

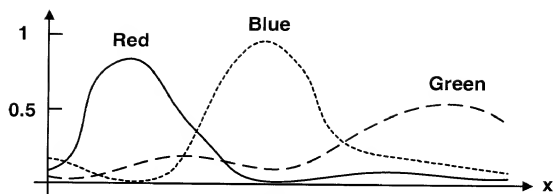


FIG. 15A

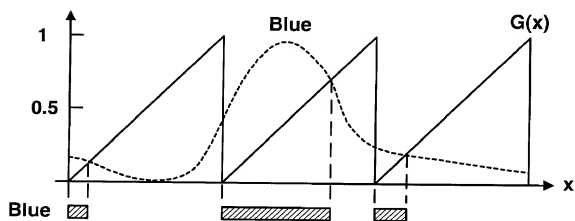


FIG. 15B

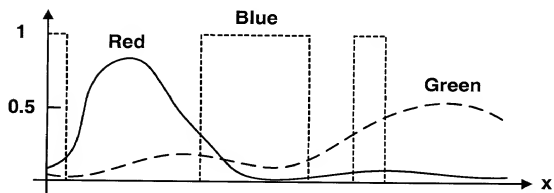


FIG. 15C

0	8	2	10
12	4	14	6
3	11	1	9
15	7	13	5

FIG. 16A

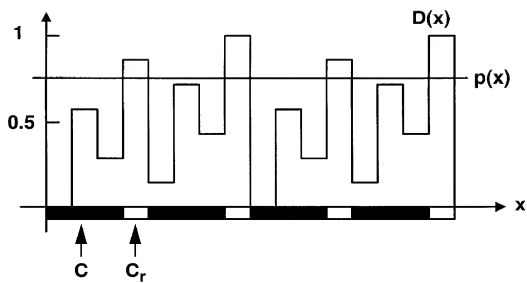


FIG. 16B

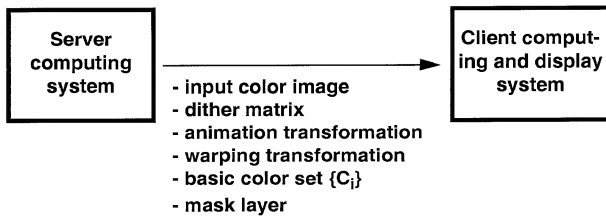


FIG. 17

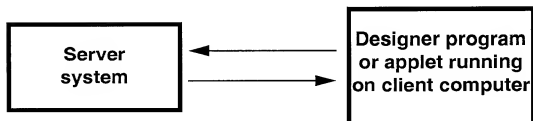


FIG. 18

**Designer logs himself on  
server synthesizing sys-  
tem**



**Designer creates the ani-  
mated microstructure  
image on his computer by  
interacting with the server**



**Designer signs a licensing  
agreement and is author-  
ized to obtain the designed  
data elements and the ani-  
mated microstructure ren-  
dering software**

**FIG. 19**



Image with animated microstructure

Web page

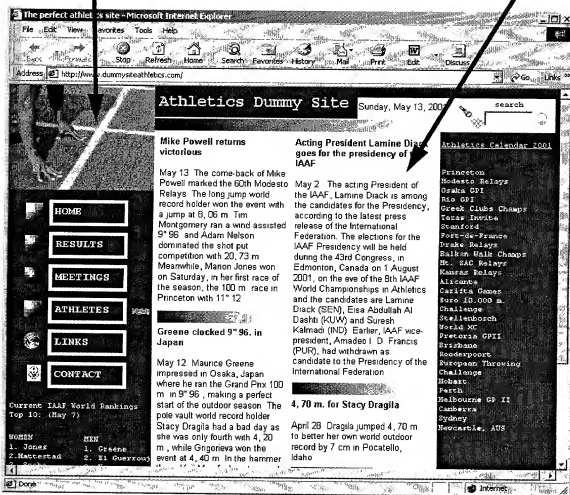


FIG. 20